

GenCore version 5.1.4 p5 4578
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OM protein - protein search, using sw model

Run on: March 17, 2003, 08:50:21 ; Search time 18 seconds
(without alignments)
1992.202 Million cell updates/sec

Title: US-10-010-227-3
Perfect score: 4055
Sequence: 1 MPGAESTPQTLYDKVLQAHV.....KAVPPTTNGEKKEPLEW 778

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 199416 seqs, 46092074 residues

Total number of hits satisfying chosen parameters: 199416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database :

Published Applications AA: *
1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep: *
2: /cgn2_6/ptodata/1/pubpaa/PC7_NEW_PUB.pep: *
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep: *
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep: *
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep: *
6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep: *
7: /cgn2_6/ptodata/1/pubpaa/PC7US_PUBCOMB.pep: *
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep: *
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13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep: *
14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1666.5	41.1	644	10	US-09-815-242-5730
2	1507.5	37.2	474	10	US-09-815-242-5127
3	1479.5	36.5	466	10	US-09-815-242-110021
4	1471	36.3	469	10	US-09-815-242-11164
5	1450.5	35.8	466	10	US-09-815-242-14017
6	1347.5	33.2	481	9	US-09-738-626-4952
7	1282	31.6	466	10	US-09-815-242-12156
8	1282	31.6	466	10	US-09-815-242-12156
9	749	18.5	264	10	US-09-815-242-12928
10	635	15.7	424	12	US-09-939-980-477
11	542	13.4	212	10	US-09-815-242-11500
12	528.5	13.0	428	12	US-10-027-450-36
13	523.5	12.9	443	12	US-10-027-450-38
14	506	12.5	201	10	US-09-815-242-14016
15	495	12.2	200	10	US-09-815-242-11165
16	493	12.2	173	10	US-09-939-980-476
17	491	12.1	201	10	US-09-815-242-10020
18	461.5	11.4	200	10	US-09-815-242-11648
19	422	10.4	190	10	US-09-815-242-12157

20	389.5	9.6	197	9	US-09-738-626-4953	Sequence 4953, Ap
21	367.5	9.1	943	9	US-09-738-626-5199	Sequence 5199, Ap
22	363	8.1	963	9	US-09-924-3968-20	Sequence 20, Appl
23	326.5	8.1	952	9	US-09-924-3968-18	Sequence 18, Appl
24	303	7.5	852	10	US-09-815-242-11535	Sequence 1153, A
25	303	7.5	853	10	US-09-815-242-11363	Sequence 1136, A
26	250	6.2	127	12	US-10-027-450-40	Sequence 40, Appl
27	247	6.1	202	10	US-09-734-017A-12	Sequence 12, Appl
28	209	5.2	263	12	US-10-027-450-51	Sequence 51, Appl
29	208.5	5.1	195	12	US-10-027-450-42	Sequence 42, Appl
30	196.5	4.8	249	12	US-10-027-450-47	Sequence 47, Appl
31	195.5	4.8	244	12	US-10-027-450-53	Sequence 53, Appl
32	187	4.6	257	12	US-10-027-450-49	Sequence 49, Appl
33	141	3.5	417	10	US-09-925-302-700	Sequence 700, App
34	137.5	3.4	126	12	US-10-027-450-44	Sequence 44, Appl
35	129.5	3.2	209	9	US-10-192-584-7	Sequence 7, Appl
36	122.5	3.0	2353	10	US-09-797-862-33	Sequence 33, Appl
37	117	2.9	806	10	US-09-815-242-11774	Sequence 1177, A
38	115.5	2.8	844	10	US-09-815-242-10039	Sequence 10039, A
39	115.5	2.8	7968	9	US-10-077-130-5	Sequence 5, Appl
40	115	2.8	4613	9	US-09-860-846-31	Sequence 31, Appl
41	115	2.8	4613	10	US-09-861-289-31	Sequence 31, Appl
42	115	2.8	11877	9	US-09-860-846-6	Sequence 6, Appl
43	115	2.8	11877	10	US-09-861-289-6	Sequence 6, Appl
44	112.5	2.8	846	10	US-09-815-242-13904	Sequence 13904, A
45	112	2.8	595	10	US-09-826-212-9	Sequence 9, Appl
46	112	2.8	595	10	US-09-935-727-11	Sequence 11, Appl
47	109.5	2.7	989	10	US-09-815-242-13236	Sequence 1323, A
48	109	2.7	595	10	US-09-921-667-6	Sequence 6, Appl
49	108.5	2.7	939	10	US-09-815-242-10797	Sequence 10797, A
50	108	2.7	667	9	US-09-815-242-10709	Sequence 10709, A
51	108	2.7	1477	9	US-10-092-880-4	Sequence 4, Appl
52	106.5	2.6	1150	10	US-09-870-122-3	Sequence 3, Appl
53	106.5	2.6	1167	10	US-09-870-122-3	Sequence 2, Appl
54	106	2.6	833	10	US-09-844-281-1	Sequence 1, Appl
55	106	2.6	5315	9	US-09-860-846-2	Sequence 2, Appl
56	106	2.6	5315	10	US-09-861-289-2	Sequence 2, Appl
57	105.5	2.6	1199	9	US-10-092-880-9	Sequence 9, Appl
58	105.5	2.6	2869	9	US-09-738-626-4434	Sequence 4434, Ap
59	104	2.6	609	9	US-09-866-0500-498	Sequence 498, App
60	103.5	2.6	1181	10	US-09-870-122-23	Sequence 23, Appl
61	102	2.5	1786	9	US-09-742-096-3	Sequence 3, Appl
62	101	2.5	804	10	US-09-815-242-13920	Sequence 13920, A
63	101	2.5	1059	10	US-09-826-312-2	Sequence 2, Appl
64	100	2.5	3782	9	US-09-860-846-4	Sequence 4, Appl
65	100	2.5	3782	9	US-09-861-289-4	Sequence 4, Appl
66	99.5	2.5	714	9	US-09-712-363-149	Sequence 149, App
67	99	2.4	553	10	US-09-954-314-6	Sequence 6, Appl
68	99	2.4	2037	9	US-09-951-402-3	Sequence 3, Appl
69	99	2.4	2037	10	US-09-951-401-3	Sequence 3, Appl
70	99	2.4	2037	9	US-09-922-101-3	Sequence 4, Appl
71	98.5	2.4	664	10	US-09-823-038A-48	Sequence 48, Appl
72	98	2.4	851	10	US-09-730-989-4	Sequence 7, Appl
73	97	2.4	578	10	US-09-052-753-7	Sequence 36, Appl
74	97	2.4	627	9	US-10-047-260-36	Sequence 37319, A
75	97	2.4	5701	10	US-09-864-761-37319	Sequence 2, Appl
76	97	2.4	26262	9	US-09-759-5088-2	Sequence 5805, Ap
77	96	2.4	836	9	US-09-738-626-5805	Sequence 1, Appl
78	96	2.4	1164	10	US-09-870-122-1	Sequence 29, Appl
79	96	2.4	1179	9	US-09-821-883-29	Sequence 15, Appl
80	96	2.4	4499	9	US-09-876-059-15	Sequence 11313, A
81	95.5	2.4	549	10	US-09-815-242-11313	Sequence 4877, Ap
82	95.5	2.4	680	9	US-09-738-626-4877	Sequence 10393, A
83	95.5	2.4	804	10	US-09-815-242-10393	Sequence 11057, A
84	95.5	2.4	806	10	US-09-815-242-11057	Sequence 3, Appl
85	95.5	2.4	1142	10	US-09-894-998-3	Sequence 12430, A
86	95	2.3	336	10	US-09-815-242-14360	Sequence 5496, Ap
87	95	2.3	339	10	US-09-815-242-5496	Sequence 7256, Ap
88	95	2.3	510	10	US-09-815-242-5256	Sequence 74, Appl
89	95	2.3	526	10	US-09-925-637-74	Sequence 292, App
90	95	2.3	760	9	US-09-712-363-292	Sequence 19, Appl
91	95	2.3	944	9	US-09-941-831-19	Sequence 14, Appl
92	95	2.3	948	9	US-09-989-350-14	

Sequence 140, App
Sequence 10, Appl
Sequence 5845, Ap
Sequence 45, Appl
Sequence 15, Appl
Sequence 9, Appl
Sequence 20, Appl
Sequence 19, Appl

189 GVSSKDVHLHAIIGTAGTGAVIEPCGVSIRSLMEARMSICNMSTEGGARGMVPAD 248
176 GVYAKOIIHLIITGYGVDFGTGVALEFTGETIKNLSMDGRMTICNMAIEGAKYGIIOPD 235
249 EITFEYKGRPLAPKVDSPWHKATQYKWLQSDPGAKYDIDVIDAKDIDVPTLTWTGSP 308
236 DITFEVKGRRPFADNF-----AKSVDKWRLYSDDDAIFORVIELDVSTLFPQVWTGPNP 290
309 EDVVPITGVVDPPTFATEAKKADGRMLQYMGKAKGTPMEDIPVDKVFISGCTNSRIED 368
291 EMGVNFSEPPF-----EISDINDQRAYDMGLEPGKAEIDILGYVFLGSGCTNARLSD 343
369 LRAAAVVKRKKAPNVKSAWVPGSLVKTQAEELGDKIFEAGFEWREAGCSMCLGM 428
344 LIEASHIVKGNKVHPNI-TAIVVPGSRVTKREAELGLDTIFKNAGFEWREPGCSMCLGM 402
429 NPDILAPQERCASTSNRNFGROGAGGRTHLMSVMAAAAGIVGKLADVRKLTIDYKASPH 488
403 NPDQVPEGVHCASSTNRNFGROGAGGRTHLMSVMAAAAGIVGKLADVRKLTIDYKASPH 454
489 IAAYQKSTVTVKPHVDERINQDAHEKOIADIPEDNNGPHTNWSASVGTSGALPKFTILKG 548
455 -----VXMAAIKPTITYKG 469
549 IAAPLEKANVDTDAIIPKQELTKTKTGLGNALFEMERFNEDEGTEKSDVNLKEPYRKAS 608
470 KIVPLFNDNIDTQIIPKVHLKRISKSGFGFPFADWRILPDGSDNPNPNKPOYKAS 529
609 ILVCTGANFGCGSRREHAPWALNDFGIRSVIAPSPADIFFNNSFKNGMLPIPIKDOAQIE 668
530 ILI-TGDNFGCGSRREHAAWALKDYGFHIIAGSFSDIFYMNCTKXAMLPVLEKNAR-E 587
669 AIAAARAGKEIEVDLNPQIKNATGETICTFEVEERFKHCLVNLGLDDIGLTMQWEDKIA 728
588 HLAKYV-----EIEVDLPNQTV--SSPDKSFHEIDETWKNKLVLNGLDDIAITLQYESLIE 641
729 EFE 731
642 KYE 644

ALIGNMENTS

RESULT 1
US-09-815-242-5730
; Sequence 5730, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; TITLE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5730
; LENGTH: 644
; TYPE: PRN
; ORGANISM: Staphylococcus aureus
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(644)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-815-242-5730
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Best Local Similarity 48.7%; Pred. No. 3.3e-130;
Matches 352; Conservative 92; Mismatches 198; Indels 81; Gaps 10;
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DB 3 QTLFDKVMNRHVLVYKLGEPQLLYIDHLIHEVTSPOAFGLRQLQNRKLRPDLTPATLD 62
QY 69 HNVPTTSRKALKDIASFIEDDSRTQCVLEENKVFYFGLSDKQGVVHVIGPEQG 128
DB 63 HNVPTI-----DIFN-IKDEIANKQTTLQKNAIDFGVHIFDMGSEQGLVHVMGPETG 115
QY 129 FTLPGLTGVCGDSHTSTHGAFALAFGIGTSEVHEVLVATQCLITPKRSKNMRIQVDGELAP 188
DB 116 LTQPGKTIKCGDSHTATGAFGAIAFGIGTSEVHEVATQTLMTQKPKNLKIDINGTLPT 175


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; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11164
; LENGTH: 469
; TYPE: PR1
; ORGANISM: Haemophilus influenzae
US-09-815-242-11164
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Best Local Similarity 59.4%; Pred. No. 3.7e-114;
Matches 281; Conservative 72; Mismatches 112; Indels 8; Gaps 2;

Qy 9 QTLYDKVLOAHVDEKLDGTLLYIDRHLVHEVTSPOAFGLNAGRKVRPPDCTLATTD 68
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Db 3 KTLYEKLFDSHIVYEAGETPILYINRHLIHEVTSPOAFDGLRVANRQVKNKTFCTMD 62

Qy 69 HNVPTTSRKALKDIASFIEDDSRTQCVTLSENVKFGVTYFGLSDKRGQIVHVGPEQG 128
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Db 63 HSISTQVRDVK-----LEGOAKIQVLELDKNTKATGIKLFIDITTTKEQGIHVHVGPEQG 116

Qy 129 FTLPGTVVCGDSHTHGAFGALFAGIGTSEVEHVLATQCLITKRSKNMROVDGELAP 188
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Db 117 LTLPGMTIVCGDSHTHGAFGALFAGIGTSEVEHVLATQTLQARAKSKWIEVRGKVAS 176

Qy 189 GVSSKDWLHAIGIITAGTGAVIEFCGSVIRSLSMSEARMSICNMSIEGGARAGMVAPD 248
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Db 177 GITAKDILAIIGKTTWAGTGTHVVEFCGGEAIQDLSMEGRMTVCNMAIENGAKAGLIAPD 236

Qy 249 EITFEYLKGRPLAPKVDSPWHKATQYWKQLQSDPGAKYDIDVIDAKOIVPLTWGTSP 308
   :|||: :|||: :|||: :|||: :|||: :|||: :|||: :|||: :|||: :|||:
Db 237 ETTFAYLKDRPHAPK--GKDWEDAVAYWKTLKSDDDAQFVTVTLEAKDIAPOVWTGNTN 294

Qy 309 EDVVPITGVVPDPETFAEAKKADGRMLQYMGKLGKAGTPMEDIPVDKVFIGSCTNSRIED 368
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Db 295 GQVISVNETIPNQEVADPVRASAKALHYIGLEAGTNLKDIKVDQVFIGSCTNSRIED 354

Qy 369 LRAAAAVVGRKAPKPVKSAMVVPVGSGLVKVTOAEELGDKIFEEAGFEWREAGCSMCLGM 428
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Db 355 LRAAAAVMGRKKADNVKILVVPVGSGLVKEQAEKEGLDKIFIAAGAEWRNPGCSMCLGM 414

Qy 429 NPDILAPQRCASTSNRNFEGRQAGGRTHLMSFVMAAAAGIVGKLADVRKLT 481
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RESULT 5

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US-09-815-242-14017
; Sequence 14017, Application US/09815242
; Patent No. US20020061569A1
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GENERAL INFORMATION:

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; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
```

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR FILING DATE: 2000-03-21

```
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14017
; LENGTH: 466
; TYPE: PR1
; ORGANISM: Salmonella typhi
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (1)...(466)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-815-242-14017
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Query Match      35.8%; Score 1450.5; DB 10; Length 466;
Best Local Similarity 60.6%; Pred. No. 1.8e-112;
Matches 286; Conservative 63; Mismatches 114; Indels 9; Gaps 4;
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Qy 9 QTLYDKVLOAHVDEKLDGTLLYIDRHLVHEVTSPOAFGLNAGRKVRPPDCTLATTD 68
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Db 3 KTLYEKLFDSHIVYEAGETPILYIDRHLVHEVTSPOAFDGLRVANRQVKNKTFCTMD 62

Qy 69 HNVPTTSRKALKDIASFIEDDSRTQCVTLSENVKFGVTYFGLSDKRGQIVHVGPEQG 128
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Db 63 HNVSTQT-----KDINA--SGEWARIQMOELIKNCNEFGVELYDLNHPYXGIVHVGPEQX 116

Qy 129 FTLPGTVVCGDSHTHGAFGALFAGIGTSEVEHVLATQCLITKRSKNMROVDGELAP 188
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Db 117 VTLPGMTIVCGDSHTHGAFGALFAGIGTSEVEHVLATQTLQGRAKTMKIEVTGNAAP 176

Qy 189 GVSSKDWLHAIGIITAGTGAVIEFCGSVIRSLSMSEARMSICNMSIEGGARAGMVAPD 248
   :|||: :|||: :|||: :|||: :|||: :|||: :|||: :|||: :|||: :|||:
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Qy 249 EITFEYLKGRPLAPKVDSPWHKATQYWKQLQSDPGAKYDIDVIDAKOIVPLTWGTSP 308
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Qy 309 EDVVPITGVVPDPETFAEAKKADGRMLQYMGKLGKAGTPMEDIPVDKVFIGSCTNSRIED 368
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Qy 369 LRAAAAVVGRKAPKPVKSAMVVPVGSGLVKVTOAEELGDKIFEEAGFEWREAGCSMCLGM 428
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Qy 429 NPDILAPQRCASTSNRNFEGRQAGGRTHLMSFVMAAAAGIVGKLADVRKLT 480
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Db 414 NNDRLNFGERCASSTNRNFEGRQGRNTHLVSPAMAAAAGVTFGHFADIRSI 465
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RESULT 6

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US-09-738-626-4952
; Sequence 4952, Application US/09738626
; Publication No. US20020197605A1
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GENERAL INFORMATION:

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; APPLICANT: NAKAGAWA, SATOSHI
; APPLICANT: MIZOGUCHI, HIROSHI
; APPLICANT: ANDO, SEIKO
; APPLICANT: HAYASHI, MIKIRO
; APPLICANT: OCHIAI, KEIKO
; APPLICANT: YOKOI, HARUHIKO
; APPLICANT: YATEISHI, NAKO
```

APPLICANT: SENOH, AKIHITO
APPLICANT: IKEDA, MASATO
APPLICANT: OKAZAKI, AKIO
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
PRIOR APPLICATION NUMBER: JP 99/377484
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: JP 00/280988
PRIOR FILING DATE: 2000-08-03
NUMBER OF SEQ ID NOS: 7059
SOFTWARE: PatentIn ver. 3.0
SEQ ID NO 4952
LENGTH: 481
TYPE: PR1
ORGANISM: Corynebacterium glutamicum
US-09-738-626-4952

Query Match 33.2%; Score 1347.5; DB 9; Length 481;
Best Local Similarity 57.6%; Pred. No. 7.1e-104;
Matches 273; Conservative 61; Mismatches 127; Indels 13; Gaps 6;

10 TLVXDKVLQAHVYDEKLDGTV-LVYIDRHLVHEVTSPOAFEGRLNAGKVRBPDCLTATD 68
15 TLAKVWRDHWVSKENGEBPDLVYIDLQHLHEVTSPOAFEGRLNAGKVRBPDCLTATD 74
69 HNVPTTSRKALKDIASFIKEDD--SRTOCVTLSENVKKEGVYTFGLSDKQGIYVHVGPE 126
75 HNVPTTEGIKT-----GSLLEINDKISRLQVSTLRDNCSEEGVYHHPMGDVRQGIYHVTGPO 130
127 QGFPLPGTVVCGDSHTSTHGAFGALAFGIGTSEVENVATQCLITKRSKNMRIOVDGEI 186
131 LGATOPGKTVTCGDSHTTHGAFGSMAFGIGTSEVENVATQTLPLKPKTMAIEVTGEL 190
187 APGVSSKQDVYLAIGITAGTGAVIEFCGSAVIRSLSEARNMSICNMSIEGARAQMYA 246
191 QPGVSSKQDLIALIATIGITGGQGYVLEFYGSAIRKMSDAMTMCNMSIEGARAQMYA 250
247 PDETFEFLKRPAPKXDSPEMHKATQYWKQLQSDPKAKYIDVFIADKDIPTLTWGT 306
251 PDQTFDFVEGRENAPK--GADWDEAVAYWKTLPRDEGATFPKVEIDISALTPFITWGT 308
307 SPEDVVPITGVVPDETFEATKAADGRRLQYMGKAGTPEMDIPVDKVFISGCTNSRI 366
309 NPGGGLPFGESVPSPEDTTNDWDKAAAEKALQYMDLVPESTPLADIKIDIVFISGCTNARI 368
367 EDLRAAAAVVGRKKAAPVYKSAVVVPGSGLVYTOAESEGLDKIFEEAGFEWREAGCSMCL 426
369 EDLQIADIDILKGHKIADQMR--MMVVVPSSTWIKQBAEALGLDKIFPDAGAEWMTAGCSMCL 427
427 GMPNDILAPQERCASTSNRNFEGRGAGGRTILMSPVMAAAAGIVGKL--ADV 477
428 GMPNDOLKPERCASTSNRNFEGRGAGGRTILMSPVMAAAATAIRGLTSSPADII 481

RESULT 7
US-09-815-242-12156
Sequence 12156, Application US/09815242
Patent No. US20020061569A1
GENERAL INFORMATION:
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith W.
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John D.
APPLICANT: Carr, Grant J.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
PROKARYOTES

FILE REFERENCE: ELITRA.011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 12156
LENGTH: 456
TYPE: PR1
ORGANISM: Staphylococcus aureus
US-09-815-242-12156

Query Match 31.6%; Score 1282; DB 10; Length 456;
Best Local Similarity 54.4%; Pred. No. 1.8e-98;
Matches 257; Conservative 64; Mismatches 131; Indels 20; Gaps 5;

9 QTLVYDKVLQAHVYDEKLDGTVLHYIDRHLVHEVTSPOAFEGRLNAGKVRBPDCLTATD 68
3 QTLVYDKVWNVHVVYKGLGEPOLYIDLHLHEVTSPOAFEGRLNAGKVRBPDCLTATD 62
69 HNVPTTSRKALKDIASFIKEDD--SRTOCVTLSENVKKEGVYTFGLSDKQGIYVHVGPE 128
63 HNVPTT-----DIFN-IKKEIANKQITTLQKNAIDGVHIFDMGSDQGIYHNVGPE 115
129 FTLPSTVTVCGDSHTSTHGAFGALAFGIGTSEVENVATQCLITKRSKNMRIOVDGEI 188
116 LTQPGKTVTCGDSHTTHGAFGALAFGIGTSEVENVATQTLQTKPKNLKIDINGTLPT 175
189 GVSCKQDVYLAIGITAGTGAVIEFCGSAVIRSLSEARNMSICNMSIEGARAQMYA 248
176 GYVAKKIIILILITVYGVDFGTGVALFTGTETIKNLSMDGRWTCNMAIEGAKYGIQPD 235
249 EITPEYVKGRLAPKXDSPEMHKATQYWKQLQSDPKAKYIDVFIADKDIPTLTWGTSP 308
236 DITPEYVKGRLAPKXDSPEMHKATQYWKQLQSDPKAKYIDVFIADKDIPTLTWGTSP 290
309 EDVVPITGVVPDETFEATKAADGRRLQYMGKAGTPEMDIPVDKVFISGCTNSRIED 368
291 EMGVNSEPP-----ELSDINDQRAYMYGPEQKXEDIDLGYYFLGSCNARISD 343
369 LRAAAAVVGRKKAAPVYKSAVVVPGSGLVYTOAESEGLDKIFEEAGFEWREAGCSMCL 428
344 LIRASHIVKGNKKNHPNI--TAVVPGSRTVREAEKIGLDTIFKNAGGEWREAGCSMCL 402
429 NPDILAPQERCASTSNRNFEGRGAGGRTILMSPVMAAAAGIVGKLADVRL 480
403 NPDQVEGVHCASTSNRNFEGRGAGGRTILMSPVMAAAAIHGFVDVRKV 454

RESULT 8
US-09-815-242-12928
Sequence 12928, Application US/09815242
Patent No. US20020061569A1
GENERAL INFORMATION:
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith W.
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John D.
APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.
APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA-011A
CURRENT APPLICATION NUMBER: US/09/815,242
CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/242,578
PRIOR FILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 12928
LENGTH: 456
TYPE: PRT
ORGANISM: Staphylococcus aureus
US-09-815-242-12928

Query Match 31.6%; Score 1282; DB 10; Length 456;
Best Local Similarity 54.4%; Pred. No. 1.8e-98;
Matches 257; Conservative 64; Mismatches 131; Indels 20; Gaps 5;

Qy 9 QTLQVQVHVEKLDGTVLLYIDRLHVEVTSPOAFEGRLNAGKVRPDPCTLATTD 68
Db 3 QTLQVQVHVEKLDGTVLLYIDRLHVEVTSPOAFEGRLNAGKVRPDPCTLATTD 62
Qy 69 HNPVTSRKALKDIASFIEDDSRTQCVLEENKVEFGVTVFGLSDKQGVHVIQPEQ 128
Db 63 HNPVTI-----DIFN-IKDEIANKITTLQKNAIDFGVHIFDMGSDQGVHVGPE 115
Qy 129 FTLPQGTIVCGDSHTSHGAFALAFIGTSEVEHVLATQCLITKRSKNMIRIQVDGELAP 188
Db 116 FTLPQGTIVCGDSHTSHGAFALAFIGTSEVEHVLATQCLITKRSKNMIRIQVDGELAP 175
Qy 189 GVSSKDVHLHATIGTAGTGAIVFEGSVIRSLSMKMSICNMSIEGAGAGVAPD 248
Db 176 GYVAKDIIHLIKTYGVDFGTGYALEFTGTETIKNLSMDGRMTICNMAIEGAGAGVAPD 235
Qy 249 BITFEVYKGRPLAPKYDSEPHWKATQYWKNLQSDPGAKYDIDVIFDAKDIVPTLTWTGTP 308
Db 236 DITFEVYKGRPLAPKYDSEPHWKATQYWKNLQSDPGAKYDIDVIFDAKDIVPTLTWTGTP 290
Qy 309 EDWVPTIGVVPDPETPAEAKKADGRMLQYMGKLAGTGMEDIPVDKVFSGCTNSRIED 368
Db 291 ENGVNFSEFP-----EINDINQRAVDYMGLEPGQKAEIDLGTVFVFGSCTNARLSD 343
Qy 369 LRAAAVVKGRKAPNVKAMVPGSLVKTQABEGLDKIFEEAGFEWFEAGCSMCLGM 428
Db 344 LIEASHIVKGNKVPNI-TAIVVPGSRTVKKEAKLGLDTIFKNAGFEWFEAGCSMCLGM 402
Qy 429 NPDILAPQERCASTSRNREGROGAGRTLMSPVMAAAAGIVKGLADVRKL 480
Db 403 NPDQVPEGVHCASTSRNREGROGAGRTLMSPVMAAAAGIVKGLADVRKL 454

RESULT 9
US-09-939-980-477
Sequence 477; Application US/09939980
Patent No. US20020082234A1
GENERAL INFORMATION:
APPLICANT: Black, Michael
Burnham, Martin

Hodgson, John
Knowles, David
Lonetto, Michael
Nicholas, Richard
Pratt, Julie
Reichard, Richard
Rosenberg, Martin
Ward, Judith
TITLE OF INVENTION: No. US20020082234A1 Prokaryotic Polynucleotides,
Polypeptides and Their Uses
NUMBER OF SEQUENCES: 534
CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
CITY: King of Prussia
STATE: PA
COUNTRY: USA
ZIP: 19406-0939
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/939,980
FILING DATE: 27-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/936,165
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Gimmi, Edward R
REGISTRATION NUMBER: 38,891
REFERENCE/DOCKET NUMBER: P50549
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-4478
TELEFAX: 610-270-5090
INFORMATION FOR SEQ ID NO: 477:
SEQUENCE CHARACTERISTICS:
LENGTH: 264 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Protein
SEQUENCE DESCRIPTION: SEQ ID NO: 477:
US-09-939-980-477

Query Match 18.5%; Score 749; DB 10; Length 264;
Best Local Similarity 53.8%; Pred. No. 1.7e-54;
Matches 147; Conservative 39; Mismatches 75; Indels 12; Gaps 3;

Qy 15 VLQHVDEKLDGTVLLYIDRLHVEVTSPOAFEGRLNAGKVRPDPCTLATTDHNPVT 74
Db 1 VNNRHVLXGKXGDPQLLYIDRLHVEVTSPOAFEGRLNAGKVRPDPCTLATTDHNPVT 60
Qy 75 SRKALKDIASFIEDDSRTQCVLEENKVEFGVTVFGLSDKQGVHVIQPEQFTLP 134
Db 61 -----DIFN-IKDEIANKITTLQKNAIDFGVHIFDMGSDQGVHVGPEGLTOPGK 113
Qy 135 TVVCGDSHTSHGAFALAFIGTSEVEHVLATQCLITKRSKNMIRIQVDGELAPGVSSKD 194
Db 114 TVVCGDSHTSHGAFALAFIGTSEVEHVLATQCLITKRSKNMIRIQVDGELAPGVSSKD 173
Qy 195 VVLAIGITAGTGAIVFEGSVIRSLSMKMSICNMSIEGAGAGVAPDEITFEY 254
Db 174 IILHLIKTYGVDFGTGYALEFTGTETIKNLSMDGRMTICNMAIEGAGAGVAPDEITFEY 233
Qy 255 LKGRPLAPKYDSEPHWKATQYWKNLQSDPGAKY 287
Db 234 VKGRPFADNF-----AKSVKRELYSDGTRY 261

Query Match 13.0%; Score 528.5; DB 12; Length 428;
Best Local Similarity 31.9%; Pred. No. 7, 6e-36;
Matches 152; Conservative 65; Mismatches 165; Indels 95; Gaps 16;

QY 33 IDRLHVEVTSPOA---FEGLRNAGRKVRPPDCTLATDHNVPVTSRKALKDIASFIKED 89
DB 12 IDVLMTHDVCVGGTIGFKKEFGEDAKWDRKVIIPDHYIFTSDRANRNV-----D 65

QY 90 DSRTCQVLEENVKFEGVTF---GLSDKR-----QGIHVHVGPGOGFTLPQTGVVCGD 140
DB 66 ILRDFCA--LEQNIK-----YFYDIIKDLSDFRANPDYKGVCHIALAQEGHCRPGEVLLGTD 118

QY 141 SHTSTHGAFGALAFGIGTSEVHVLAATQCLITKRSKNMRIQVDELAPGVSSKQVVLHAI 200
DB 119 SHTCNAGAFQGFATGNTDAGFVMTGKALLKVPPTIRFVLGDEMPPYLLAKDLILQII 178

QY 201 GIIGTAGGTGAVIEFCGVSIRLSMEARMSICNMSIEGGARAGMVAPEITFEYLKGRPL 260
DB 179 GEISVSGATYKSMFEVGVSTVESLTMEERMTLCNMVVEAGGKNGVPADETTFKYLEGR-- 236

QY 261 APKYDSEWHKATQYWKNLQSDPGCAKYDIDVFIDAKDIVPTLTWGTSPEDVVPITGVVVD 320
DB 237 -----TSVDYQPYSDAARFFSDYRFDVSKLEPVV---AKPHS-----PD 274

QY 321 PETFATEAKKADGRRLQYMGKAGTGMEDIPVDKVFISGCTNSRIEDLRAAAAVVVKGRK 380
DB 275 NRALARECK-----DVKIDRVYIGSCTGGKTEDFLAAAKVFLASG 314

QY 381 KAPNVKSAMV-----VPGSLVKTQAESEGLDKIFEEAGFEW-REAGCSMC 425
DB 315 KVKVPTFLVPATQKVMVDVYSLVPVPGSG-GKTCAQ-----IFEEAGCDTPASPNCGAC 367

QY 426 LGMNPDLAPQER---CASTSNRNFEGRQG-AGGRTHLMSPVMAAAGIVGKLADVR 478
DB 368 LGGPRDTYARMNEPTVCVSTTNRNFPGRMGHKEGQIYLASPYTAASALTYGVTDPR 424

RESULT 13
US-10-027-450-38
; Sequence 38, Application US/10027450
; Patent No. US20020102715A1
; GENERAL INFORMATION:
; APPLICANT: Falco, Saverio Carl
; APPLICANT: Hitz, William D.
; APPLICANT: Kinney, Anthony J.
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Rafalski, J. Antoni
; TITLE OF INVENTION: PLANT BRANCHED CHAIN AMINO ACID BIOSYNTHETIC ENZYMES
; FILE REFERENCE: BB-1126
; CURRENT APPLICATION NUMBER: US/10/027,450
; CURRENT FILING DATE: 2001-12-20
; PRIOR APPLICATION NUMBER: 60/063,423
; PRIOR FILING DATE: 1997 October 28
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: Microsoft Word Version 7.0A
; SEQ ID NO 38
; LENGTH: 443
; TYPE: PRT
; ORGANISM: Zea mays
US-10-027-450-38

Query Match 12.9%; Score 523.5; DB 12; Length 443;
Best Local Similarity 30.9%; Pred. No. 2,1e-35;
Matches 147; Conservative 69; Mismatches 164; Indels 95; Gaps 14;

QY 33 IDRLHVEVTSPOAFEGLR---NAGRKVRPPDCTLATDHNVPVTSRKALKDIASFIKED 89
DB 27 DVLMTHDVCVGGPAGFIDFKKEFGEDARWDRKLVIPDHYIFTSDRGRKRV-----D 80

QY 90 DSRTCQVLEENVKFEGVTF---GLSDKR-----QGIHVHVGPGOGFTLPQTGVVCGD 140
DB 81 ILRDFCA--EQNIK-----YFYDIIKDLSDFRANPDYKGVCHIALAQEAHCRPGEVLLGTD 133

QY 141 SHTSTHGAFGALAFGIGTSEVHVLAATQCLITKRSKNMRIQVDELAPGVSSKQVVLHAI 200
DB 134 SHTCNAGAFQGFATGNTDAGFVMTGKALLKVPPTIRFVLGDEMPPYLLAKDLILQII 193

QY 201 GIIGTAGGTGAVIEFCGVSIRLSMEARMSICNMSIEGGARAGMVAPEITFEYLKGRPL 260
DB 194 GEISVSGATYKSMFEVGVSTVESLTMEERMTLCNMVVEAGGKNGVPADETTFKYLEG--- 250

QY 261 APKYDSEWHKATQYWKNLQSDPGCAKYDIDVFIDAKDIVPTLTWGTSPEDVVPITGVVVD 320
DB 251 -----KTSVDYEPVYSDAARFFSDYRFDVSKLEPVVAKPHSPDNRAP----- 293

QY 321 PETFATEAKKADGRRLQYMGKAGTGMEDIPVDKVFISGCTNSRIEDLRAAAAVVVKGRK 380
DB 294 ---ARECK-----DVKIDRVYIGSCTGGKTEDFLAAAKVFLASG 329

QY 381 KAPNVKSAMV-----VPGSLVKTQAESEGLDKIFEEAGFEW-REAGCSMC 425
DB 330 KVKVPTFLVPATQKVMVDVYSLVPVPGSG-----GKTCQIFEEAGCDTPASPNCGAC 382

QY 426 LGMNPDLAPQER---CASTSNRNFEGRQG-AGGRTHLMSPVMAAAGIVGKLAD 476
DB 383 LGGPRDTYARMNEPTVCVSTTNRNFPGRMGHKEGQIYLASPYTAASALTYGVTD 437

RESULT 14
US-09-815-242-14016
; Sequence 14016, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14016
; LENGTH: 201
; TYPE: PRT
; ORGANISM: Salmonella typhi
US-09-815-242-14016

Query Match 12.5%; Score 506; DB 10; Length 201;
Best Local Similarity 53.1%; Pred. No. 1,7e-34;
Matches 104; Conservative 36; Mismatches 48; Indels 8; Gaps 6;

QY 542 KFTILKGAAPLEKANVDTDAIIPKQFLKTKIKRTGLGNALFYEMRF-NEGTGKTS-DFVL 599
DB 4 KFTQHTGLVVPDAAANVDTDAIIPKQFLQKVTRTGTGAHLFNDRFLDKGQOPNPFVL 63

QY 600 NKEPYKASIVCTGANGCGSSREHAPMALNDPGIRSVIAPSPADIFPNNSFKKGMPI 659
Db 64 NPEYQASILLAR-ENGCGSSREHAPMALTDYGFVKVIAPFADIFYGNSFNNQLP 122
QY 660 PIKQAOIEAI--AAEAPAGKEIYVDLPNOLIKNATGENTICFEVEEPEPKCLVNLGDI 717
Db 123 KLSDE-QVDELFITLVKANPGIKFEYDLAQYVK--AGDKTYSFKIDPFRRHCLNGLDSI 179
QY 718 GLTWOMEDKIAEPEAK 733
Db 180 GLTLQHEDAIAEYENK 195

RESULT 15
US-09-815-242-11165
; Sequence 1165, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; PRIOR FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; NUMBER OF SEQ ID NOS: 1410
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11165
; LENGTH: 200
; TYPE: prt
; ORGANISM: Haemophilus influenzae
US-09-815-242-11165

Query Match 12.2%; Score 495; DB 10; Length 200;
Best Local Similarity 53.4%; Pred. No. 1.4e-33;
Matches 103; Conservative 34; Mismatches 48; Indels 8; Gaps 6;
QY 543 FTILKGIAPLEKAVNDTDALIPKQFLTKRTGLGNALPYEKMF-NEDGTESK-DEVLN 600
Db 4 FQOLSGLVPLDLAANDTDALIPKQFLTKRTGLGNALPYEKMF-NEDGTESK-DEVLN 63
QY 601 KKPYKASIVCTGANGCGSSREHAPMALNDPGIRSVIAPSPADIFPNNSFKKGMPI 660
Db 64 YQYQCATILLAR-KVLGCGSSREHAPMALADYGFVKVIAPSPADIFYGNSFNNQLP 122
QY 661 IKDQAOIEAI--AAEAPAGKEIYVDLPNOLIKNATGENTICFEVEEPEPKCLVNLGDI 718
Db 123 LSEB-EVEEIFQWVANEKGQIHVDLEAMTV--TVGDXYTFELDERRRHCLNGLDSI 179
QY 719 LTMOMEDKIAEPE 731
Db 180 LTLQHEDKISAYE 192

RESULT 16
US-09-939-980-476
; Sequence 476, Application US/09939980
; Patent No. US20020082234A1
; GENERAL INFORMATION:
; APPLICANT: Black, Michael
; APPLICANT: Burnham, Martin
; APPLICANT: Hodgson, John
; APPLICANT: Knowles, David
; APPLICANT: Lonetto, Michael
; APPLICANT: Nicholas, Richard
; APPLICANT: Pratt, Julie
; APPLICANT: Reichard, Richard
; APPLICANT: Rosenberg, Martin
; APPLICANT: Ward, Judith
; TITLE OF INVENTION: No. US20020082234A1 Prokaryotic Polynucleotides,
; POLYPEPTIDES AND THEIR USES
; NUMBER OF SEQUENCES: 534
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/939,980
; FILING DATE: 27-Aug-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/936,165
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Gimm, Edward R.
; REGISTRATION NUMBER: 38,891
; REFERENCE/DOCKET NUMBER: P50549
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610-270-4478
; TELEFAX: 610-270-5090
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 476:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 173 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: Protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 476:
US-09-939-980-476

Query Match 12.2%; Score 493; DB 10; Length 173;
Best Local Similarity 56.4%; Pred. No. 1.7e-33;
Matches 101; Conservative 21; Mismatches 49; Indels 8; Gaps 2;
QY 302 LWTGSPEDVVPITGVVDPETFEATKAKDGRMLQVYGLKAGTPMEDIPYDKVEIGSC 361
Db 1 VTWGTNPEMGVNFSPF-----EINDINDQRAYVDYGLBPGQKAEIDIDLGVTIGSC 53
QY 362 TNSRTEDEAAAVYKGGKKAQNVYSAMVVPSSGLVKTQAESEGLDITEEAGFEWREK 421
Db 54 TNAISDILIESHIVKGVKHPNI-TAIVPSSRTVKKEAEKLGDTTFKMGFEWREK 112
QY 422 CSMCLGNPDIILAPQERCASTSNRNFEGROGAGRTHLMSPVMAAAGIVGKLADVRKL 480
Db 113 CSMCLGNPDIILAPQERCASTSNRNFEGROGAGRTHLMSPVMAAAGIVGKLADVRKL 171

```
RESULT 17
US-09-815-242-10020
; Sequence 10020, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11648
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-815-242-11648
Query Match 12.1%; Score 491; DB 10; Length 201;
Best Local Similarity 53.1%; Pred. No. 3.1e-33;
Matches 104; Conservative 31; Mismatches 53; Indels 8; Gaps 6;

QY 542 KFTILKGIAAPLEKANVDTAIPKQFLKTKRTGLGNALFYEMRF-NEDGTEKS-DFVL 599
Db 4 KFTIKTGLVPLDAANVDTAIPKQFLKTKRTGLGNALFYEMRF-NEDGTEKS-DFVL 63

QY 600 NKEPYRKASILVCTGANFGCGSSREHAPWALNDFGIRSVIAPSFADIFFNNSFKNGMLPI 659
Db 64 NFQYQGASILLAR-ENFGCGSSREHAPWALTDYGFVKVVIAPSFADIFYGNSFNNQLLPV 122

QY 660 PIKQQAQIEAIAA--EAAEAGRAKEIEVDLPNQLIKNATGETICTFVEEERKHCVLNGLDDI 717
Db 123 KLSD-AEVDLEFALVKANPGIHFDVLEAQEVK--AGEKTYRFTIDAFRRHCHMNGLDLSI 179

QY 718 GLTMQMEDKIAEPEAK 733
Db 180 GLTLQHDDAIAAYEAK 195

RESULT 18
US-09-815-242-11648
; Sequence 11648, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10020
; LENGTH: 201
; TYPE: PRT
; ORGANISM: Escherichia coli
US-09-815-242-10020
Query Match 12.1%; Score 491; DB 10; Length 201;
Best Local Similarity 53.1%; Pred. No. 3.1e-33;
Matches 104; Conservative 31; Mismatches 53; Indels 8; Gaps 6;

QY 542 KFTILKGIAAPLEKANVDTAIPKQFLKTKRTGLGNALFYEMRF-NEDGTEKS-DFVL 599
Db 4 KFTIKTGLVPLDAANVDTAIPKQFLKTKRTGLGNALFYEMRF-NEDGTEKS-DFVL 63

QY 600 NKEPYRKASILVCTGANFGCGSSREHAPWALNDFGIRSVIAPSFADIFFNNSFKNGMLPI 659
Db 64 NFQYQGASILLAR-ENFGCGSSREHAPWALTDYGFVKVVIAPSFADIFYGNSFNNQLLPV 122

QY 660 PIKQQAQIEAIAA--EAAEAGRAKEIEVDLPNQLIKNATGETICTFVEEERKHCVLNGLDDI 717
Db 123 KLSD-AEVDLEFALVKANPGIHFDVLEAQEVK--AGEKTYRFTIDAFRRHCHMNGLDLSI 179

QY 718 GLTMQMEDKIAEPEAK 733
Db 180 GLTLQHDDAIAAYEAK 195

RESULT 19
US-09-815-242-12157
; Sequence 12157, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11648
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-815-242-11648
Query Match 11.4%; Score 461.5; DB 10; Length 200;
Best Local Similarity 48.7%; Pred. No. 8.7e-31;
Matches 96; Conservative 38; Mismatches 54; Indels 9; Gaps 6;

QY 542 KFTILKGIAAPLEKANVDTAIPKQFLKTKRTGLGNALFYEMRFNEDGTEK--SDFVL 599
Db 4 KFTIKTGLVPLDAANVDTAIPKQFLKTKRTGLGNALFYEMRFNEDGTEK--SDFVL 63

QY 600 NKEPYRKASILVCTGANFGCGSSREHAPWALNDFGIRSVIAPSFADIFFNNSFKNGMLPI 659
Db 64 NFQYQGASILLAR-ENFGCGSSAS--TPWALTDYGFVKVVIAPSFADIFYGNSFNNQLLPV 121

QY 660 PIKQQAQIEAI--AAEAGRAKEIEVDLPNQLIKNATGETICTFVEEERKHCVLNGLDDI 717
Db 122 TLSDE-QVDLEFVKLVQANPGITFEVDLEAQVVK--AGDKTYSFKIDDFRRHCHMNGLDLSI 178

QY 718 GLTMQMEDKIAEPEAK 734
Db 179 GLTLQHEAAISDYERKL 195
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; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12157
; LENGTH: 190
; TYPE: PRF
; ORGANISM: Staphylococcus aureus
US-09-815-242-12157

Query Match          10.4%; Score 422; DB 10; Length 190;
Best Local Similarity 47.7%; Pred. No. 1.5e-27;
Matches 94; Conservative 29; Mismatches 66; Indels 8; Gaps 4;

QY 538 AGLPKFTLKGIAAPLEKANYDTDAIIPKQPLKTIKRTGLGNALFYEMRNEDGTEKSDPF 597
D 2 AAIKPIITTVGKIVPLFNDNIDTDQIIPKVLKRISKSGFPGFADWKRYLDPGSDNPDF 61
;
QY 598 VLNKEPRKASILVCTGANFGCGSSREHAPMALNDFGIRSVIAPSPADIFFNNSFRKGMPL 657
D 62 NPKPQYKGSIL--TGDNFGCGSSREHAPMALNDYGHIIIIAGSFSDIFYNMCTKNAML 120
;
QY 658 PIPKDAQIEAI--AAERAKKEIYVDLPNOLIKNATGETICTFEVEERPKCLVNGLDLI 717
D 121 PIVLEKAR--EHLAKV---EIVVDLPNQIV--SSPKSFHEIDETWKAKLVNGLDLI 173
;
QY 718 GLTWMEDKIAEFAAK 734
D 174 AITLYESLIEKYEKSL 190
;

RESULT 20
US-09-738-626-4953
; Sequence 4953, Application US/09738626
; Publication No. US20020197605A1
; GENERAL INFORMATION:
; APPLICANT: NAKAGAWA, SATOSHI
; APPLICANT: MIZOGUCHI, HIROSHI
; APPLICANT: ANDO, SEIKO
; APPLICANT: HAYASHI, MIKIRO
; APPLICANT: OCHIAI, KEIKO
; APPLICANT: YOKOI, HARUHIKO
; APPLICANT: TATEISHI, NAKO
; APPLICANT: SENOH, AKIHRO
; APPLICANT: IKEDA, MASATO
; APPLICANT: OZAKI, AKIO
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
; FILE REFERENCE: 249-125
; CURRENT APPLICATION NUMBER: US/09/738, 626
; PRIOR APPLICATION NUMBER: JP 99/377484
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: JP 00/159162
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: JP 00/280988
; PRIOR FILING DATE: 2000-08-03
; NUMBER OF SEQ ID NOS: 7059
; SOFTWARE: PatentIn ver. 3.0
; SEQ ID NO 4953
; LENGTH: 197
; TYPE: PRF
; ORGANISM: Corynebacterium glutamicum
US-09-738-626-4953

Query Match          9.6%; Score 389.5; DB 9; Length 197;
Best Local Similarity 43.9%; Pred. No. 8.2e-25;
Matches 86; Conservative 36; Mismatches 63; Indels 11; Gaps 5;
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QY 540 LPKFTLKGIAAPLEKANYDTDAIIPKQPLKTIKRTGLGNALFYEMRNEDGTEKSDPVL 599
D 1 MEKFTTYTGCVPLQSRNVNTDQIIPAVILKRVIRTEGDELFSNRKND-----ENFVL 55
;
QY 600 NKEPYRKASILVCTGANFGCGSSREHAPMALNDFGIRSVIAPSPADIFFNNSFRKGMPLPI 659
D 56 NTDYKNGSVLV--AGPDFGCGSSREHAPMALMDYGFRAVFSRPADIFRNGSGKAGML--T 113
;
QY 660 PIPKDAQIEAI--AAERAKKEIYVDLPNOLIKNATGETICTFEVEERPKCLVNGLDLI 717
D 114 GIMEQSDIELMKLMEGTPELELVNLEKQIV--TADDVVISFEVDPIYIRWLMWGLDDA 171
;
QY 718 GLTWMEDKIAEFAAK 733
D 172 GLTLRKLDIEDYEAK 187
;

RESULT 21
US-09-738-626-5199
; Sequence 5199, Application US/09738626
; Publication No. US20020197605A1
; GENERAL INFORMATION:
; APPLICANT: NAKAGAWA, SATOSHI
; APPLICANT: MIZOGUCHI, HIROSHI
; APPLICANT: ANDO, SEIKO
; APPLICANT: HAYASHI, MIKIRO
; APPLICANT: OCHIAI, KEIKO
; APPLICANT: YOKOI, HARUHIKO
; APPLICANT: TATEISHI, NAKO
; APPLICANT: SENOH, AKIHRO
; APPLICANT: IKEDA, MASATO
; APPLICANT: OZAKI, AKIO
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
; FILE REFERENCE: 249-125
; CURRENT APPLICATION NUMBER: US/09/738, 626
; PRIOR APPLICATION NUMBER: JP 99/377484
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: JP 00/159162
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: JP 00/280988
; PRIOR FILING DATE: 2000-08-03
; NUMBER OF SEQ ID NOS: 7059
; SOFTWARE: PatentIn ver. 3.0
; SEQ ID NO 5199
; LENGTH: 943
; TYPE: PRF
; ORGANISM: Corynebacterium glutamicum
US-09-738-626-5199

Query Match          9.1%; Score 367.5; DB 9; Length 943;
Best Local Similarity 22.6%; Pred. No. 6.3e-22;
Matches 178; Conservative 108; Mismatches 291; Indels 209; Gaps 29;

QY 118 GIVH-----VIGPEQFTLPFTTVOCGDSHTSTHGFALARGIGTSEVENHVLATQ 168
D 179 GIVHQVNIYELARVVDNGLAVPDCIGT--DSHTTMENGLGILMGVGGIEMAAAMLGQ 237
;
QY 169 CLITKSKMRLQVDELAPGVSSKQVVTAAIGITAGGTGAVIEFCGVSIVLSNEAR 228
D 238 PVSMLIPRVVGFKLGEIPLVGVATDVVLITEMLRDHGVQKFEVFGSGVAVPLANR 297
;
QY 229 MSICNMSIGARAGVAVADEITFEYLK--GRPLARKYDSEPHKATQYWKNLQSDPGAK 286
D 298 ATIGMNSPEFGSTCAMFPIDEBTTKYLRTGAREBOVALVEAYAKAGMULD--EDTYEAR 356
;
QY 287 YDIDVIFDAKDIVPTLTWGTSPEDVVPITGVV---PDDETFAEAKKAD---GRRMLQ 338
D 357 YSEYLELDLSTVVPISIAGKRPQDRITLSEAKEQFRKDLPTYVDDAVSVDTSIIPATRMVN 416
;
QY 339 YNGLAKGPTMEIIPDK----- 355
```

Db 417 EGG---GOPEGVEADYNYNWAGSGESLATGAEGRSPKPVTVASPOGGEYTIIDHGMVAI 473
Qy 356 VFISGCTNSRIEDLRAAAV-----KGRKAPNVKSMVPGSLVKTQAEELDKI 409
Db 474 ASITSCNTSNPSVMIGAGLIAKAAEKLKSKPWKT-ICAPGSQVVDGYQORADLWLD 532
Qy 410 FEEAGFEWREAGSCSLGNPDILAPOERCAS-----TSNRNPEGRQAGGR- 456
Db 533 LEAMGFYLSGFCCTTCIGNSGEL--PEEISAINEHDLTATAVLSGNRNPEGRISPDVKM 590
Qy 457 THLSPVMAAAAGIVGK-----LADVRKLTIDYKASPHIAAYOKST 496
Db 591 NYLASPIWIAIYAGTMDFDENEALGQDQDNDVFLKDI-----WPSTE 636
Qy 497 VTKPHVDERINODAEHKDII-----ADIPEDNNGPHNTNTSASVGTSA---GLP- 541
Db 637 EIEDTIQQAISRELYEADYVFKGDKQWQELDVPTGDTFENDENSTYTRKAPYFDGMPV 696
Qy 542 ---KETILKGIAPLEKA--NVDTDALIPKQFLK----- 570
Db 697 EPVAVTDIOG-ARVIAKLGDSTVTDHISPASSIKPGTPAAQYLDHCVHERHDYNSLGSRR 755
Qy 571 -----TIKRTGLGNALF-----YEMRFNEDGTEKSDVFLNKEPYRKAS---ILVCT 613
Db 756 GNHEVMMRGTFANIRLQNLVDIAGGYTRDFTQEGAPQA-FYDASVNYKAAIGPLVLVG 814
Qy 614 GANFGCGSSREHAPWALNDFGIRSVIAPSPADIFFNNSFKNGMLPTPIKDOAQIEATAAE 673
Db 815 GKEYGTGSSRDWAAKTNLLGIRAVITESFERIHRNLIANGVVVLPQFPAGESHESLUGLD 874
Qy 674 ARAGKEIYDLNPQIKNATGETICTFEEVEFRKHCLVNLGLDDIGLTMQMEDKIAEFAEK 733
Db 875 ---GTE-TFDITGLTALN-EGEIPKIVKVTATKE-----NG-----DVVEFDVA 913
Qy 734 MTRTEP 739
Db 914 VRIDTP 919
RESULT 22
US-09-924-396B-20
; Sequence 20, Application US/09924396B
; Patent No. US20020165349A1
; GENERAL INFORMATION:
; APPLICANT: Kirsch, Wolff
; APPLICANT: Lennart, Anton
; APPLICANT: Kelln, Wayne
; APPLICANT: Kang, Dae-Kyung
; APPLICANT: Levine, Rodney
; APPLICANT: Rouault, Tracey
; TITLE OF INVENTION: IRON-REGULATING PROTEIN-2 (IRP-2) IS
; FILE REFERENCE: LOMAU.140A
; CURRENT APPLICATION NUMBER: US/09/924, 396B
; CURRENT FILING DATE: 2002-04-25
; PRIOR APPLICATION NUMBER: 60/222, 863
; PRIOR FILING DATE: 2000-08-04
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 963
; TYPE: PRT
; ORGANISM: Rattus No. US20020165349Alvegicus
US-09-924-396B-20
Query Match 8.1%; Score 329; DB 9; Length 963;
Best Local Similarity 22.7%; Pred. No. 1e-18;
Matches 168; Conservative 115; Mismatches 302; Indels 156; Gaps 28;
Qy 118 GIVH-----VIGPEQGFLLPGTTVCGDSTHTSHGAFALAFGIGTSEVHVLATQ 168
Db 251 GMAHQVNLEHLSRVVFEADLLFP-DSVIGTDSHTVNGLILGWGGIETEAVMLGL 309

Qy 169 CLITKSKNMRIQVDGELAPGVSSKDVVLHAIIGIITAGGTGAVIEFCGVSIRLSMEAR 228
Db 310 PVTLTLPVGVGCELTSSNAFVTSIDIVLGTIKHLRQVGVAGKEVEFFGSGVSQLSIYDR 369
Qy 229 MSTCNWSIEGAGAGWAPDEITFEYLK--GRPLAPKYDPSPEHKAQYWKNLQSDPGAK 286
Db 370 TTIANMCPYGAILSPFPVDNVTLRHLEHTGDFDKTLESMEEYKAVKLFRNDENSSPE 429
Qy 287 YDIDVFIDAKDIIVPTLTWTGTSPEVDVPIITGVVDPDET-----FATAKKAQGRM 336
Db 430 YSQVIQINLSIVASVSGPKPQDRVAVTDMKSDFOACLNEKVGFKGFQVAAEKQSDTVS 489
Qy 337 LOYVGLKAGTPMEDIPVDKVFISGCTNSRIEDLRAA-----AVVGRKKAAPNVKSAV 390
Db 490 VRYDGSSEYKLSHGSVWIAAVI--SCTNCPNSVMLAAGLAKAVETGLRVKPYIRTSL- 546
Qy 391 VPGSLVKTQAEELDKIPEEAGFEWREAGSCSLG--MNPDILAPOER-----CAS 441
Db 547 SPGSGMTHYLSSSGVLPLYSLKLGFEIVGYGCTCGVNTAPLSEAILNAVKGQDLATCGV 606
Qy 442 TS-NRNFEGRQAGGR-THLMSPVMAAAAGIVGKLADVRKLTIDYKASPHIAAYOKSTVTK 499
Db 607 LSGNKNFEGRLCDCVRANYLASPLVWYAIAGTVN-----IDFOTEP---LGTDSGTGN 658
Qy 500 PHVD-----ERINODAHEKDIIA-----NVDTDALIP-----KQFLKTIKRTGLN 534
Db 659 IYLHDIWPSREEVHQIEEHVILSNFKALKEKVMGNKRNSLDAPSDSVLFFPMDVKSTYI 718
Qy 535 GTSAGLKPFTILKGIAPLEKA-----NVDTDALIP-----KQFLKTIKRTGLN 579
Db 719 RCPSEFFDKLTKEPAASQPIENAHVLLYLGDSVTTDHSFAGSIARSRAAKVLTNRGLTP 778
Qy 580 ALF--YEMRFNED-----GTEKSDVFLNK-----EPYRKAS 608
Db 779 REFNSYGARRGNDVMTTRGTTFANIKLFNKFGKPAKTIHFPSGQTLDFEAAELYQEG 838
Qy 609 I--LVCTGANFGCGSSREHA---PWALNDFGIRSVIAPSPADIFFNNSFKNGMLPTPIKD 663
Db 839 IPLIILAGKYGSGNSRDWAAKGPYLL---GVKALAESYEKIHKDHILGIGIAPLEFLP 895
Qy 664 QAQTEATAAEARAGKEI-EVDLPNOL-----IKNATGE---TICTFEEVEFRKHCLVN 712
Db 896 GENADSLGL---SGREVSLSFPPELFPGLITINIKTSTGKEFSVIAAFE----- 941
Qy 713 GLDDIGLTMQMEDKIAEFAEK 733
Db 942 --NDVEITLYKHGGLLNFVAR 960
RESULT 23
US-09-924-396B-18
; Sequence 18, Application US/09924396B
; Patent No. US20020165349A1
; GENERAL INFORMATION:
; APPLICANT: Kirsch, Wolff
; APPLICANT: Lennart, Anton
; APPLICANT: Kelln, Wayne
; APPLICANT: Kang, Dae-Kyung
; APPLICANT: Levine, Rodney
; APPLICANT: Rouault, Tracey
; TITLE OF INVENTION: IRON-REGULATING PROTEIN-2 (IRP-2) IS
; FILE REFERENCE: LOMAU.140A
; CURRENT APPLICATION NUMBER: US/09/924, 396B
; CURRENT FILING DATE: 2002-04-25
; PRIOR APPLICATION NUMBER: 60/222, 863
; PRIOR FILING DATE: 2000-08-04
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 952
; TYPE: PRT
; ORGANISM: Homo Sapiens

; Sequence 11363, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11363
; LENGTH: 853
; TYPE: PRT
; ORGANISM: Helicobacter pylori
US-09-815-242-11363

Query Match 7.5%; Score 303; DB 10; Length 853;
Best Local Similarity 25.9%; Pred. No. 1.2e-16;
Matches 140; Conservative 77; Mismatches 204; Indels 120; Gaps 26;

QY 8 POTLYDKVLQAHVVDKLDGTLLYIDRLHVEVTSQPAFEG--RNAGKVRPDC--- 62
DB 324 PFTLLDEV-----RASGRIPLIIGRLTNKA---RKFLGLGESEAPKPSAPKSDAK 372
QY 63 --TLA-----TTDHNVPPT---SRKALKDIAS-----FIKE 88
DB 373 GYTLAQKIVGHACGVKGILPGTYCEPKVTTVGSQDTTGAMTRDEVKELASLKFDAPFVLQ 432
QY 89 DRSRTQC-----VTLEENVKFGVTYFGLS-DKROGIHVHIGPEQGTLPGLTVVCGDS 141
DB 433 SFCHTAAYPKPSDVSUHLATLPGFITORGGVALHPGDGVHTWLNRMG--LPDTLGTGDS 490
QY 142 HTSTHGAFG-ALAFGIGTSEVHVLATQCLITKRSKNMRIQVDGELAPGVSKDVV---- 196
DB ~ 491 HT-----RFLGISFPAGSLVAFAAVTGTMPLNMPESVLVRFKGMNPGITLRLDVNAIP 546
QY 197 LHAI--GIITGAGTGAVTEFCGVSIR-----SLSHEARMSICNMSIEGGARAGWAPD- 248
DB 547 YYAIKKGILL-TVEKKGINVFNRIEIGLDPDKMEQAFELSDASAEASAAACVVRNLK 605
QY 249 EITFEVLKG-----RPLAPKQSPSEWHK-----ATQYWKV-----LQSDPGAKYDIDVFID 294
DB 606 EMIEYLRKNIKLIDEMIASGYDEKETLKKRRDAMQAWNDVNPVLEPDSNAQYAAVIEID 665
QY 295 AKDIV-PTLTWTGTSPEVDVVPITGVDPDPETATEAKKADGRMLQYMGLKAGTPMEDIPV 353
DB 666 VAEITEPILACPNDDPDVATLSEVLAD-----ITGKRPHA-----I 701
QY 354 DKVFTGSCNTNSRIEDLRAAAATVYKGRKKAENVKSAVMVPGSLVKVTOAEDEGLDKIFEAA 413
DB 702 DEVFTIGSCM-TNIGHFRAFGIEIVK--NAPPSQARLWVVPSPKMDQEQLINEGYAIFGAA 759

QY 414 GFEWRREAGCSMCLGMNPDILLAPOERCASSTNRNPEGRQAGGRTHLMSPVNAAAAGIVGK 473
DB 759 GARTEVPGCSLCLMG-NOARVRDNAVVFSTSTRNFDNRMGKGVYLGSAELGAACALLGR 817
QY 474 L 474
DB 818 I 818

Search completed: March 17, 2003, 08:55:11
Job time : 35 secs